ABSTRACT OF THE DISCLOSURE

A method of manufacturing a semiconductor device is provided that can suppress impurity concentration reduction in a doped channel region arising from formation of a gate insulating film. With a silicon oxide film (20) and a silicon nitride film (21) being formed, p-type impurity ions (23_1, 23_2) are implanted in a Y direction from diagonally above. As for an implant angle α of the ion implantation, an implant angle is adopted that satisfies the relationship $\tan^{-1}(W2/T) < \alpha \leq \tan^{-1}(W1/T)$, where W1 is an interval between a first portion (21_1) and a fourth portion (21_4) and an interval between a third portion (21_3) and a sixth portion (21_6); W2 is an interval between a second portion (21_2) and a fifth portion (21_5); T is a total film thickness of the silicon oxide film (20) and the silicon nitride film (21). When the implant angle α is controlled within that range, impurity ions (23_1, 23_2) are implanted into a second side surface ($10A_2$) and a fifth side surface ($10A_5$) through a silicon oxide film (13).